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Ritualized commitment displays in humans and non-human primates

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Abstract

Collective ritual is virtually omnipresent across past and present human cultures, and analogous behaviors were documented in non-human primates. However, surprisingly little is known about the evolution of ritual in the hominin lineage as well as their underlying neurocognitive mechanisms. Here, we identify similarity, coalitional, and commitment signals as the essential features of collective ritual and argue that these signals evolved to facilitate mutualistic cooperation. We compare evidence for the communicative function of ritual between contemporary hunter-gatherers and non-human primates and discuss the underlying cognitive mechanisms facilitating these signals. Importantly, we will provide experimental evidence from our lab supporting the role of ritual as a platform for cooperative communication. Synthesizing this evidence, we will suggest that between 500 and 300 ka, collective ritual as a repetitively performed communicative act evolved from rudimentary signaling systems to help facilitate mutualistic cooperation and collective action.